West Virginia Department of Environmental Protection
Division of Air Quality

Fact Sheet

For Final Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: R30-04900019-2003
Plant Identification Number: 04900019
Permittee: Consolidated Coal Company
Facility Name: Loveridge Preparation Plant
Mailing Address: P.O. Box 100
Osage, WV 26543

Physical Location:	Fairmont, Marion County, West Virginia
UTM Coordinates:	561.6 km Easting • 4,383.9 km Northing • Zone 17
Directions:	Approximately 1 mile NW of Fairmont on State Road 17 then left on Sugar Run Road to the Loveridge Preparation Plant

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Facility Description

Coal Preparation Plant with Thermal Dryer

Emissions Summary

Plantwide Emissions Summary [Tons per Year]

Criteria Pollutants	Potential Emissions	1999 Actual Emissions
Carbon Monoxide (CO)	435.0	53.27
Nitrogen Oxides (NO_X)	172.8	38.63
Particulate Matter (PM_{10})	237.0	7.8
Total Particulate Matter (TSP)	376.0	15.60
Sulfur Dioxide (SO_2)	620.0	116.27
Volatile Organic Compounds (VOC)	214.6	10.29

PM_{10} is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	1999 Actual Emissions
Hydrofluoric Acid	1	
Hydrochloric Acid	3	

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit 435 tons per year of Carbon Monoxide, 173 tons per year of Nitrogen Oxides, 237 tons per year of Particulate Matter (PM10), 620 tons per year of Sulfur Dioxide, and 215 tons per year of VOC's. Due to this facility's potential to emit over 100 tons per year of CO, NOx, PM10, SO2, and VOC's, Loveridge Preparation Plant is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR6	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 61	Asbestos inspection and removal
	45CSR5	Control air pollution of coal preparation plants
	45CSR10	Control air pollution of Sulfur Oxides
	40 C.F.R. Subpart Y	Standards of Performance for Coal Preparation Plants
State Only:	45CSR4	No objectionable odors.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.,* 45CSR16, 45CSR15, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit *(if any)*
R13-760	8/13/84	
CO-R13, 14-96-22	7/19/96	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

a. 45CSR5 Control of Particulate Matter from Coal Preparation Plants.

Stockpiles, haulroads, and vehicular activity are exempted from opacity periodic monitoring. Under 45CSR5, all coal preparation plants and coal handling operations are required to be equipped with a fugitive dust control system as such the opacity standard applies facility-wide; however, as a practical matter emissions from stockpile wind erosion, haulroads, and vehicular activity are exempted from the requirement to periodically monitor opacity because of the nature of the emissions occurring over such a large area. This exemption does not apply to load-in or loadout from the stockpiles. The facility does have the duty to minimize dust generation and atmospheric entrainment from stockpiles, haulroads, and vehicular activity.

b. Periodic monitoring for particulate matter.

The periodic monitoring approach requires annual 40 CFR 60, Appendix A, Method 9 visible emission evaluations (Method 9 evaluation) for each emission unit subject to a visible emission requirement. If the results of such evaluations indicate that visible emissions are in excess of 50 percent of an allowable visible emission requirement for a given unit, a Method 9 evaluation will be conducted at least every 14 days for such unit. After three consecutive Method 9 evaluations indicate that visible emissions are at or below 50 percent of the applicable visible emissions requirement, annual Method 9 evaluations may resume.

The permittee is also required to conduct weekly 40 CFR 60, Appendix A, Method 22 visible emissions observations (Method 22 observations). If during these observations or at any other time, visible emissions appear to exceed 50 percent of the allowable visible emissions requirement, a Method 9 evaluation must be conducted within one month unless corrective action is taken and recorded. The permittee is required to keep appropriate records of all evaluations, observations, and corrective actions.

Based on the large number of equipment subject to the opacity standard (i.e. all coal processing, conveying, storage, transfer and loading equipment and associated fugitive dust control systems); the requirement for all coal preparation plants and coal handling operations to install, inspect and maintain fugitive dust control systems; and EPA's approval of similar provisions for other coal preparation plants, WVDAQ believes that the periodic monitoring approach for this facility is appropriate.

c. 45CSR5 Control of Particulate Emission from Coal Thermal Drying Operations.

The Loveridge thermal drier installed after 1974 has a volumetric flow rate of than 231,000 cubic feet per minute and a mass emissions limit of 40 lbs/hr. Therefore, the maximum concentration of particulate matter is 0.020 grains per cubic foot which is less than the Subpart Y limit of 0.031 grains/ft^3.
Compliance via stack testing for the mass limit for particulate matter can therefore be used to show compliance with the concentration based limits. For continuous monitoring purposes the owner must install continuous monitoring devices to measure temperature, pressure loss through the venturi constriction of the scrubber, and the water supply pressure to the scrubber. The rational for the monitoring devices is to

insure proper combustion efficiency, correct pressure drop through the venturi constriction for maximum efficiency of particulate capture, and insure the scrubber sprays are not plugging.

Initial stack testing will establish instrument operating range parameters in which the thermal dryer will be operated to provide a reasonable assurance that the thermal dryer unit is in compliance with opacity and particulate loading limits. The following parameters will be recorded during the compliance test:

a. Opacity readings on the exhaust stack following the procedures of Method 9;
b. Amount of coal burned and the amount of coal dried;
c. Coal drying temperature and residence time in the dryer;
d. Temperature of the gas stream at the exit of the thermal dryer;
e. Flow rate through the dryer and converted to dry standard cubic feet;
f. Water pressure to the control equipment; and
g. Pressure loss of the inlet airflow to the scrubber. The pressure drop will be measured between the inlet airflow to the scrubber and outlet airflow of the scrubber, which is atmospheric loss through the venturi constriction of the control equipment.

By recording "a" above, compliance with opacity can be obtained using an approved EPA Method. By recording "b", "c", "d", and "e" above, the loading of the thermal dryer can be determined in order to establish operating parameter ranges. By recording "f " and "g" above, baseline operating conditions can be established to ensure efficiency of the control equipment.

d. 45CSR10 Control Limits of Sulfur Dioxide from Coal Preparation Plants.

It was determined through the agency that dryers are defined as manufacturing process source operations and not as fuel burning units within the definition and intent of Regulation 10. With this rule interpretation, thermal dryers must comply with Regulation 10 Section 4.1. To show compliance with 45CSR10.4.1., the company shall conduct fuel sampling analysis of the coal three times per day. Fuel sampling is a reasonable way of testing for sulfur content and is an acceptable testing method. Compliance with the 2.5% sulfur dryer fuel rate can show compliance with the Section 4.1 limit.

By calculating SO_2 emissions using the maximum design heat input, the minimum gas flow rate in the stack, and actual sulfur content and actual Btu value of the sampled coal, compliance can be ensured at lower heat inputs and/or higher permitted stack gas flow rates.

e. 45CSR13 NOx, CO, VOC Emission Limits

The facility has NOx, CO, and VOC emission limits in their R13 permit. These limits were originally based on EPA AP-42 emission factors. A consent order was issued requiring for CO and VOC's to be stack tested, which has been incorporated into this Permit. Additionally stack testing for NOx shall be required. If compliance is shown at maximum permitted operating throughputs, then continual compliance with the throughput limits and hours of operation will show compliance with the NOx, CO, and VOC R13 limits. Continual compliance is required under 4.2.10.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

a. 40CFR60.252(b) Particulate Matter Concentration Limits for Pneumatic coal-cleaning equipment
The Loveridge facility does not use an air stream to separate coal from refuse.

b. 45CSR7 Particulate Matter Air Pollution from Manufacturing Processes
This facility meets the definition of a coal preparation, and 45CSR§5-2.4.b. exempts them from 45CSR7.

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: May 16, 2003
Ending Date: June 15, 2003

All written comments should be addressed to the following individual and office:

Mike Egnor
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
7012 MacCorkle Avenue, SE
Charleston, WV 25304-2943

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

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Response to Comments (Statement of Basis)

N/A